UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,144	12/21/2001	Satoshi Kamiya	396184/00	5505

7590 03/28/2006

McGinn & Gibb, PLLC
Suite 200
8321 Old Courthouse Road
Vienna, VA 22182-3817

EXAMINER	
MOORE JR, MICHAEL J	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/024,144	KAMIYA ET AL.
	Examiner	Art Unit
	Michael J. Moore, Jr.	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 11/15/2004 and 8/16/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

2. The information disclosure statement filed 12/21/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. There does not appear to be copies provided for any of the non-patent literature documents cited in this IDS.

Drawings

3. Figures 1-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims **1, 17, 27, and 43** are objected to because of the following informalities:

Regarding claim **1**, on line 4, the word "the" before word "Ingress" should be "an". Also, on line 5, the word "an" is needed before the word "Egress".

Regarding claim **17**, on line 5, the word "the" before word "Ingress" should be "an". Also, the word "an" is needed before the word "Egress".

Regarding claim **27**, on line 4, the word "the" before word "Ingress" should be "an". Also, on line 5, the word "an" is needed before the word "Egress".

Regarding claim **43**, on line 5, the word "the" before word "Ingress" should be "an". Also, the word "an" is needed before the word "Egress".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims **1-52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miki et al. (U.S. 6,771,662) ("Miki") in view of "GFP for Data over SONET/SDH" (T1X1.5/2000-147) by *Hernandez-Valencia et al.* cited in Applicant's IDS (hereinafter "*Hernandez-Valencia*").

Regarding claim **1**, *Miki* teaches a packet forwarding apparatus 10 (frame transfer apparatus) in Figure 3 that contains an egress routing unit 40 (frame formation section) that generates a shim header H4 (see Figures 4 and 26) that contains a label corresponding to a label switched path of a network (see Figure 1) as spoken of on column 14, lines 12-37.

Miki further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4.

Miki does not teach the use of label switching in a Generic Framing Procedure environment.

However, *Hernandez-Valencia* teaches on page 4, section 5.1.2.1.3, that the GFP extension header field of a GFP frame supports technology specific data link headers such as virtual link identifiers (label corresponding to a path ID).

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the label switching teachings of *Miki* in the

GFP environment of *Hernandez-Valencia* in order to provide more flexible routing of GFP frames.

Regarding claim **2**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **3**, *Miki* teaches a shim header field H4 in Figure 26 containing a label field H41. *Miki* does not teach a header field containing a discard eligibility field or a reserved field.

However, *Hernandez-Valencia* teaches the use of a discard eligibility (DE) field as well as a spare field in the payload header of Figure 11 on page 15. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the label field teachings of *Miki* with the discard eligibility field and reserved field teachings of *Hernandez-Valencia* in order to effectively regulate the transmission of incoming packets.

Regarding claim **4**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length containing an 11 bit label field, a 1 bit DE field, and a 4 bit reserved field.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **5**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44.

Regarding claim **6**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44.

Regarding claim **7**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Regarding claim **8**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Regarding claim **9**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37 as well as the Ethernet destination address correspondence to output L2 information spoken of on column 2, lines 1-6.

Regarding claim **10**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37 as well as the destination IP address field H13 of an IP packet header shown in Figure 22.

Regarding claim **11**, *Miki* further teaches egress routing unit 40 (path frame transmission section) that performs edge-ingress packet forwarding as spoken of on column 14, lines 12-37.

Regarding claim **12**, *Miki* further teaches egress routing unit 40 (label switching section) that performs edge-egress packet forwarding as spoken of on column 14, lines 12-44.

Regarding claim **13**, *Miki* further teaches the use of Ethernet on column 2, lines 1-6.

Regarding claim **14**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44 as well as Ethernet use as spoken of on column 2, lines 1-6 as well as Figure 23.

Regarding claim **15**, *Miki* further teaches the use of POS on column 2, lines 9-13 as well as Figure 31.

Regarding claim **16**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44 as well as the use of POS on column 2, lines 9-13 as well as Figure 31.

Regarding claim **17**, *Miki* teaches a packet forwarding apparatus 10 (frame transfer apparatus) in Figure 3 that contains an egress routing unit 40 (frame reception section) that generates a shim header H4 (see Figures 4 and 26) that contains a label corresponding to a label switched path of a network (see Figure 1) as spoken of on column 14, lines 12-37.

Miki also teaches that egress routing unit 40 contains multi-layer processing unit 42 (label switching and transmission section) in Figure 10 that examines the internal header H6 (see Figure 5) of an incoming packet and determines whether to perform edge-ingress forwarding, edge-egress forwarding, MPLS core forwarding or IP forwarding on the packet.

Miki does not teach the use of label switching in a Generic Framing Procedure environment.

However, *Hernandez-Valencia* teaches on page 4, section 5.1.2.1.3, that the GFP extension header field of a GFP frame supports technology specific data link headers such as virtual link identifiers (label corresponding to a path ID).

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the label switching teachings of *Miki* in the GFP environment of *Hernandez-Valencia* in order to provide more flexible routing of GFP frames.

Regarding claim **18**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **19**, *Miki* teaches a shim header field H4 in Figure 26 containing a label field H41. *Miki* does not teach a header field containing a discard eligibility field or a reserved field.

However, *Hernandez-Valencia* teaches the use of a discard eligibility (DE) field as well as a spare field in the payload header of Figure 11 on page 15. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the label field teachings of *Miki* with the discard eligibility field and reserved field teachings of *Hernandez-Valencia* in order to effectively regulate the transmission of incoming packets.

Regarding claim **20**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length containing an 11 bit label field, a 1 bit DE field, and a 4 bit reserved field.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **21**, *Miki* further teaches egress routing unit 40 (path frame transmission section) that performs edge-ingress packet forwarding as spoken of on column 14, lines 12-37.

Regarding claim **22**, *Miki* further teaches the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **23**, *Miki* further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4 as well as the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **24**, *Miki* further teaches the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **25**, *Miki* further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4 as well as the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **26**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Regarding claim **27**, *Miki* teaches a packet forwarding apparatus 10 in Figure 3 that contains an egress routing unit 40 that generates a shim header H4 (see Figures 4 and 26) that contains a label corresponding to a label switched path of a network (see Figure 1) as spoken of on column 14, lines 12-37.

Miki further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4.

Miki does not teach the use of label switching in a Generic Framing Procedure environment.

However, *Hernandez-Valencia* teaches on page 4, section 5.1.2.1.3, that the GFP extension header field of a GFP frame supports technology specific data link headers such as virtual link identifiers (label corresponding to a path ID).

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the label switching teachings of *Miki* in the GFP environment of *Hernandez-Valencia* in order to provide more flexible routing of GFP frames.

Regarding claim **28**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **29**, *Miki* teaches a shim header field H4 in Figure 26 containing a label field H41. *Miki* does not teach a header field containing a discard eligibility field or a reserved field.

However, *Hernandez-Valencia* teaches the use of a discard eligibility (DE) field as well as a spare field in the payload header of Figure 11 on page 15. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the label field teachings of *Miki* with the discard eligibility field and reserved field teachings of *Hernandez-Valencia* in order to effectively regulate the transmission of incoming packets.

Regarding claim **30**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length containing an 11 bit label field, a 1 bit DE field, and a 4 bit reserved field.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **31**, *Miki* further teaches egress routing unit 40 of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44.

Regarding claim **32**, *Miki* further teaches egress routing unit 40 of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44.

Regarding claim **33**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Regarding claim **34**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Regarding claim **35**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37 as well as the Ethernet destination address correspondence to output L2 information spoken of on column 2, lines 1-6.

Regarding claim **36**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37 as well as the destination IP address field H13 of an IP packet header shown in Figure 22.

Regarding claim **37**, *Miki* further teaches egress routing unit 40 (path frame transmission section) that performs edge-ingress packet forwarding as spoken of on column 14, lines 12-37.

Regarding claim **38**, *Miki* further teaches egress routing unit 40 (label switching section) that performs edge-egress packet forwarding as spoken of on column 14, lines 12-44.

Regarding claim **39**, *Miki* further teaches the use of Ethernet on column 2, lines 1-6.

Regarding claim **40**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44 as well as Ethernet use as spoken of on column 2, lines 1-6 as well as Figure 23.

Regarding claim **41**, *Miki* further teaches the use of POS on column 2, lines 9-13 as well as Figure 31.

Regarding claim **42**, *Miki* further teaches egress routing unit 40 (packet extracting section) of Figure 3 that removes the shim header from a received encapsulated packet as spoken of on column 14, lines 38-44 as well as the use of POS on column 2, lines 9-13 as well as Figure 31.

Regarding claim **43**, *Miki* teaches a packet forwarding apparatus 10 in Figure 3 that contains an egress routing unit 40 that generates a shim header H4 (see Figures 4 and 26) that contains a label corresponding to a label switched path of a network (see Figure 1) as spoken of on column 14, lines 12-37.

Miki also teaches that egress routing unit 40 contains multi-layer processing unit 42 in Figure 10 that examines the internal header H6 (see Figure 5) of an incoming packet and determines whether to perform edge-ingress forwarding, edge-egress forwarding, MPLS core forwarding or IP forwarding on the packet.

Miki does not teach the use of label switching in a Generic Framing Procedure environment.

However, *Hernandez-Valencia* teaches on page 4, section 5.1.2.1.3, that the GFP extension header field of a GFP frame supports technology specific data link headers such as virtual link identifiers (label corresponding to a path ID).

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the label switching teachings of *Miki* in the GFP environment of *Hernandez-Valencia* in order to provide more flexible routing of GFP frames.

Regarding claim **44**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **45**, *Miki* teaches a shim header field H4 in Figure 26 containing a label field H41. *Miki* does not teach a header field containing a discard eligibility field or a reserved field.

However, *Hernandez-Valencia* teaches the use of a discard eligibility (DE) field as well as a spare field in the payload header of Figure 11 on page 15. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the label field teachings of *Miki* with the discard eligibility

field and reserved field teachings of *Hernandez-Valencia* in order to effectively regulate the transmission of incoming packets.

Regarding claim **46**, *Miki* teaches a shim header field H4 in Figure 26 that is 32 bits in length. *Miki* does not teach an extension header field that is 16 bits in length containing an 11 bit label field, a 1 bit DE field, and a 4 bit reserved field.

However, *Hernandez-Valencia* teaches where the GFP extension header field is 0-to-60 octets in length on page 4, section 5.1.2.1.3. At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the teachings of *Hernandez-Valencia* to choose a 16 bit extension header field in order to regulate the number of label switched paths.

Regarding claim **47**, *Miki* further teaches egress routing unit 40 (path frame transmission section) that performs edge-ingress packet forwarding as spoken of on column 14, lines 12-37.

Regarding claim **48**, *Miki* further teaches the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **49**, *Miki* further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4 as well as the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **50**, *Miki* further teaches the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **51**, *Miki* further teaches the formation of an MPLS packet (path frame) containing a header H1 and payload D encapsulated with headers H6, H5, and H4 as shown in Figure 4 as well as the use of PPP over SONET on column 2, lines 9-13 as well as Figure 31.

Regarding claim **52**, *Miki* further teaches where the value indicated by the output L2 identifier H67 of the internal header field H6 is set in the label H41 of the shim header H4 as spoken of on column 14, lines 33-37.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kong et al. (U.S. 2002/0176450) and Hernandez-Valencia et al. (U.S. 6,993,046) are other references considered pertinent to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:00am - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J. Moore, Jr.
Examiner
Art Unit 2616

mjm MM

Seema S. Rao 3/27/06
SEEMA S. RAO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600